

SHIP NOV. 23

Work Order ID 153337

153337

Page 1

Wednesday, November 16, 2016 11:53:07 A

Item ID: D206-628-037

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Maintenance Step LH - High Gear 407

Start Date: 11/16/2016 Start Qty: 1.00

1

Cust Item ID:

Required Date: 11/30/2016 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: DAS Date: NOV 16 2016

Tooling:

Date:

Run Start *NR1*

QC: 21
9-89

Date:

SPC (Y/N):

Date:

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
IIN-D206-628	G								

100

Document Control

0.00 NOV 16 2016

100

DOCUMENT CONTROL

DC

Memo

0.00

Doc.Control -USB or Paperwork

Photocopy blue file and type labels as per PPP D206-628-037 CHG 001

IX DAS
28
9-89

NOV 22 2016

110

Pick Kit

0.00

110

Packaging

Memo

0.00

Packaging

IX

DAS
26
9-89

NOV 16 2016

DAS
27
9-89

120

QC4- 100% Inspect kits for completeness

0.00

120

QC

Memo

0.00

Quality Control

IX DAS
28
9-89

NOV 22 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
							Completed By		
							Lead hand / Supervisor Approval Verification		
							QC / QA Coordinator Approval		
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐	
OTHER : _____					

Picklist Print

Wednesday, November 16, 2016 11:53:10 AM

Page 1

Work Order ID: 153337

153337

Parent Item: D206-628-037

D206-628-037

Parent Item Name: Maintenance Step LH - High Gear 407

Start Date: 11/16/2016

Required Date: 11/30/2016

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP REV:A 11.08.08 NEW ISSUE DD VERF:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D4342-041 *D4342-041* Step, LH Maintenance		Manufactured	No			110	Each	0.0000	1	1			
D2731-3RG *D2731-3RG* Mounting Lug		Manufactured	No			110	Each	7.0000	2	2			
DAS 28 9-89 Location ST532 140860 152632 Loc Qty 7 1 6 Loc Code NOV 16 2016													
D3394-1RG *D3394-1RG* Lug		Manufactured	No			110	Each	4.0000	2	2			
DAS 28 9-89 Location ST532 152537 Loc Qty 4 4 Loc Code NOV 16 2016													
D4309-1 *D4309-1* Bushing		Manufactured	No			110	Each	22.0000	2	2			
DAS 28 9-89 Location ST091 151106 Loc Qty 22 22 Loc Code NOV 16 2016													

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

Picklist Print

Wednesday, November 16, 2016 11:53:10 AM

Page 2

Work Order ID: 153337

15.3337

Parent Item: D206-628-037

D206-628-037

Parent Item Name: Maintenance Step LH - High Gear 407

Start Date: 11/16/2016

Required Date: 11/30/2016

Start Qty: 1.00

Required Qty: 1.00

AN4-12A Purchased No 110 Each 146.0000 4 4

AN4-12A

Bolt

DAS
28
9-89

Location

Loc Qty

Loc Code

FG	10	
120423	10	
ST344	136	
m134606	11	
m135704	125	

**

DAS
26
9-89
27
9-89

NOV 16 2016

4x

AN4-15A Purchased No 110 Each 961.0000 2 2

AN4-15A

Bolt

DAS
28
9-89

Location

Loc Qty

Loc Code

GA	10	
120449	10	
over003	645	
m135859	645	
ST343	306	
m135859	306	

**

DAS
26
9-89
2
9-

NOV 16 201

2x

MS21042-4 MS21042L4 Purchased No 110 Each 2.0000 6 6

MS21042-4

Nut

DAS
28
9-89

Location

Loc Qty

Loc Code

ST304	2	
9063	2	

**

m135774

DAS
26
9-89
DAS
27
9-89

NOV 16 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
							Completed By		
							Lead hand / Supervisor Approval Verification		
							QC / QA Coordinator Approval		

Root Cause				FAULT CATEGORY							
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong	☐
Design	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions	☐
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance	☐
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect	☐
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing	☐
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved	☐
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing	☐
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish	☐
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread	☐
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence	☐
Past Expiry Date	☐	Manufacturing Process	☐	OTHER : _____							
Misidentified	☐	Past Due	☐								

Picklist Print

Wednesday, November 16, 2016 11:53:10 AM

Page 3

Work Order ID: 153337

153337

Parent Item: D206-628-037

D206-628-037

Parent Item Name: Maintenance Step LH - High Gear 407

Start Date: 11/16/2016

Required Date: 11/30/2016

Start Qty: 1.00

Required Qty: 1.00

NAS1149D0463J

Purchased

No

110

Each

3,073.000

6

6

NAS1149D0463.J

Washer

DAS
26
9-89

NOV 16 2016

DAS
28
9-89

Location

Loc Qty

Loc Code

GA	84	
M134508	13	
M135056	71	
ST260a	1600	
M136044	1600	
ST263	1389	
M135671	3	
<u>M135767</u>	386	
M135948	1000	

DAS
27
9-89

lok.

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
		OTHER :			

153337

Page 1

N900040100

Setup Start *NS1*

Stop *NS2*

Start Date: 11/16/2016 **Start Qty:** 1.00 ***1***

Required Date: 11/30/2016 **Req'd Qty:** 1.00 ***1***

Run Start *NR1*

Approvals: _____ **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Stop *NR2*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Draw Nbr	Revision Nbr
IIN-D206-628	G

DAS

100

21 NOV 16 2016
9-89

0.00

Memo

Photocopy blue file and type labels as per PPP D206-628-037 CHG 001

0.00

110

Memo

Packaging

0.00

120

Memo

Quality Control

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

5.4 CREW STEP PARTS LIST

Qty -015	Qty -016	Qty -025	Qty -026	Qty -035	Qty -036	Part Number	Description
X						D206-628-015	CREW STEP, LH 206A/B
	X					D206-628-016	CREW STEP, RH 206A/B
		X				D206-628-025	CREW STEP, LH 206L/L-1/L-3/L-4
			X			D206-628-026	CREW STEP, RH 206L/L-1/L-3/L-4
				X		D206-628-035	CREW STEP, LH 407
					X	D206-628-036	CREW STEP, RH 407
				2	2	D2731-3RG	MOUNTING LUG
2	2	2	2			D2731-7RG	MOUNTING LUG
				2	2	D3394-1RG	MOUNTING LUG
2	2	2	2			D3394-3RG	MOUNTING LUG
		1		1		D4308-041	CREW STEP, LH
			1		1	D4308-042	CREW STEP, RH
2	2	2	2	2	2	D4309-1	BUSHING
1						D4357-041	CREW STEP, LH
	1					D4357-042	CREW STEP, RH
		4	4			AN4-11A	BOLT
4	4	4	4	4	4	AN4-12A	BOLT
2	2	2	2	2	2	AN4-15A	BOLT
6	6	6	6	6	6	MS21042-4	NUT
6	6	6	6	6	6	NAS1149D0463J	WASHER (AN960JD416)

5.5 MAINTENANCE STEP PARTS LIST

Qty -017	Qty -018	Qty -027	Qty -028	Qty -037	Qty -038	Part Number	Description
X						D206-628-017	MAINTENANCE STEP, LH 206A/B
	X					D206-628-018	MAINTENANCE STEP, RH 206A/B
		X				D206-628-027	MAINTENANCE STEP, LH 206L/L-1/L-3/L-4
			X			D206-628-028	MAINTENANCE STEP, RH 206L/L-1/L-3/L-4
				X		D206-628-037	MAINTENANCE STEP, LH 407
					X	D206-628-038	MAINTENANCE STEP, RH 407
2	2			2	2	D2731-3RG	MOUNTING LUG
		2	2			D2731-7RG	MOUNTING LUG
2	2			2	2	D3394-1RG	MOUNTING LUG
		2	2			D3394-3RG	MOUNTING LUG
2	2	2	2	2	2	D4309-1	BUSHING
		1		1		D4342-041	MAINTENANCE STEP, LH
			1		1	D4342-042	MAINTENANCE STEP, RH
1						D4358-041	MAINTENANCE STEP, LH
	1					D4358-042	MAINTENANCE STEP, RH
4	4	4	4	4	4	AN4-12A	BOLT
		4	4			AN4-13A	BOLT
2	2	2	2	2	2	AN4-15A	BOLT
6	6	6	6	6	6	MS21042-4	NUT
6	6	6	6	6	6	NAS1149D0463J	WASHER (AN960JD416)

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Revision: G

Date: 11.02.25